

**STANDARD CHLORINE CHEMICAL CO. INC. SUPERFUND SITE
MONTHLY PROGRESS REPORT
JANUARY 2016**

I. Actions Completed During the Reporting Period (January 2016)

Preparation of the RI Report Addendum to document the RI activities completed in June-July and October-November 2015 was completed. This report was submitted to EPA on January 6, 2016.

Revision of the Focused Feasibility Study to address EPA comments and incorporate information for Area 2 continued.

II. Results of Sampling, Tests, and Data Received by Respondents

Data received by Respondents during the reporting period included routine data associated with the operations and maintenance of Hydraulic Control Treatment System (HCTS). These data are summarized on a quarterly-basis in an appendix to the monthly progress reports. The O&M summary for the fourth quarter of 2015 is included as Appendix A to this monthly progress report.

III. Work Planned for the Next Two Months (February and March 2016)

Revision of the Focused Feasibility Study to address EPA comments and incorporate information for Area 2 will continue.

If available, receive and review results of HCIA geotechnical assessment regarding effects of HCIA fill placement on slurry wall.

Monthly progress reports will continue to be prepared and submitted to EPA.

IV. Problems Encountered/Anticipated Delays

None this reporting period.

V. Operations and Maintenance Information

Routine operations and maintenance activities were completed. A summary of operations and maintenance activities are provided on a quarterly-basis. The O&M summary for the fourth quarter of 2015 is included as Appendix A to this monthly progress report.

1.0 DESCRIPTION OF ACTIVITIES COMPLETED

1.1 HYDRAULIC CONTROL TREATMENT SYSTEM (HCTS)

- Continued routine HCTS operation, monitoring, inspection and reporting efforts as summarized below:
 - Average monthly flows for October, November and December 2015 were 17.6 gpm, 16.1gpm and 18.4 gpm, respectively. The total volume of water treated this reporting period was 2,348,141 gallons.
 - Monthly NJPDES sample collection pursuant to NJ Permit No. NJ0155438 was completed. There were no exceedances of permit monitored constituents noted during this period.
 - Retrofitting of existing hydraulic control (HC) and DNAPL recovery (DR) wells and associated sub-grade electrical and groundwater conveyance components to accommodate for future placement of Processed Dredge Material (PDM) on the Seaboard Site, as proposed by HCIA, was initiated during the week of April 6, 2015. To date HC and DR well assemblies (PVC and HDPE risers, electrical panels and concrete well vaults) were raised at HCWU-23, 24, 25 and 26 as well as DRWL-10 and 11. PZ-8U/L, PZ-9U/L, PZ-10U/L and PZ-11U/L series piezometers were also raised to accommodate for future PDM placement. Currently FTS is awaiting PDM placement in the area of the above referenced HCTS well network by HCIA to complete the retrofitting efforts.
 - FTS replaced subgrade electrical wiring to HCWU-22, 23, 24, 25 and 26 during the week of December 14, 2015. The well field was operational the week of December 21st with the exception of HCWU- 23 which required a new submersible groundwater pump. HCWU-23 groundwater pump was replaced during the week of January 18, 2016.
- Water level gauging data collected during the reporting period from the piezometers, hydraulic control wells and DNAPL recovery wells are provided in Table 1. Figures 1 and 2 provide 2015 potentiometric surface data (representing a typical HCTS operational scenario for the

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reporting period), for both the surficial fill unit and deep sand unit, respectively. Figure 1 shows pronounced gradients toward HCWs across the site within the shallow fill unit.

Potentiometric surface elevation contours for the deep sand unit are provided on Figure 2. As indicated, the hydraulic gradient in the sand unit is essentially flat over the area enclosed by the barrier wall system. Similar to the shallow unit, substantial differentials between the water levels inside and outside of the slurry wall exist which is an indication of the lack of hydraulic communication and groundwater flux through the barrier wall in the deep sand unit.

Figures 3, 4 and 5 present graphs of the monthly (October, November and December 2015, respectively) water level measurements made in the shallow unit piezometers inside and outside of the slurry wall and the nearest hydraulic control well. The graphs show that hydraulic gradients inside the barrier wall continue to be inward toward the hydraulic control wells. The graphs also show substantial differentials continue to exist between the water levels inside and outside of the slurry wall. Such differentials are indicative of a lack of hydraulic communication between the fill unit inside and outside of the barrier wall and are demonstrative of the effective containment resulting from the low permeability barrier wall system.

1.2 DNAPL MEASUREMENT AND RECOVERY

- Apparent DNAPL thickness measurements from recovery wells are provided in Table 2. DNAPL recovery efforts for the fourth quarter of 2015 produced 254 gallons of DNAPL. A total of 5,979 gallons of DNAPL have been recovered from the DNAPL recovery well network since January 2012. Total DNAPL recovery to date is provided in the summary table below.

Well ID	October 2015 DNAPL Recovery (gal)	November 2015 DNAPL Recovery (gal)	December 2015 DNAPL Recovery (gal)	Total DNAPL Recovered (gal)
DRWL-1	39	NR	NR	435
DRWL-5	NR	47	NR	443
DRWL-7	NR	NR	NR	50

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DRWL-9	NR	NR	NR	921
DRWL-10	39	NR	NR	181
DRWL-11	39	42	43	3,943
MW-D-28	1	3	1	6

1.3 NON-HCTS INSPECTIONS

- Continued post-construction inspections of the surface covers, cathodic protection system/steel sheet pile wall, stormwater management system, freshwater wetlands, fences and slurry wall working platform.
- Based upon the July 2015 Wetland Mitigation Monitoring performed by Princeton Hydro, current conditions of the onsite fresh water wetlands are considered to be at or near the 10% maximum coverage of non-native invasive species specified in the wetland mitigation program for the SCCC site. It is anticipated that FTS, on the CPG's behalf, will petition the agency to conduct a final site inspection of the freshwater wetlands at the beginning of the 2016 growing season.

1.4 ADDITIONAL COMPLETED EFFORTS

- Annual cathodic protection system inspection was conducted during the 4th Quarter of 2015. Based on the annual inspection report, the cathodic protection system was found to be operating as designed and within acceptable performance criteria.

2.0 PROJECTED FUTURE ACTIVITIES

2.1 HCTS RELATED EFFORTS

- Continue routine HCTS operations, monitoring and maintenance.
- DNAPL recovery will continue.
- Additional monitoring wells installed as part of the RI/FFS efforts performed during the 2nd and 4th quarter of 2015 were added to routine monthly gauging and DNAPL recovery efforts (where applicable). Table 2 provides gauging information for both MW-D-28 and MW-D-35 locations. During October, November and December 2015, MW-D-28 exhibited recoverable quantities of DNAPL each month while DNAPL

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was not observed during fourth quarter gauging efforts at MW-D-35, MW-37, MW-38 or MW-39.

2.2 NON-HCTS RELATED EFFORTS

- Routine Non-HCTS (consolidation area and IRM surface covers) inspections and maintenance will continue.
- Soil erosion areas and re-vegetation issues will be addressed, as necessary.
- Quarterly inspections of the surface cover systems and repair (as necessary) will continue.

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TABLES

Table 1

**Standard Chlorine Chemical Co., Inc.
4th Quarter 2015 Progress Report**

HCTS Gauging Data Summary

Well ID	Top of Casing Elevation MSL (NAD 83)	Oct-15			Nov-15			Dec-15		
		Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
HC-PZ-1U	11.18	8.01	16.70	3.17	7.84	16.70	3.34	6.35	16.70	4.83
HC-PZ-2U	11.32	7.40	16.10	3.92	7.29	16.10	4.03	6.89	16.10	4.43
HC-PZ-3U	10.33	9.30	15.00	1.03	8.65	15.00	1.68	7.60	15.00	2.73
HC-PZ-4U	10.16	7.33	14.60	2.83	6.75	14.60	3.41	4.65	14.60	5.51
HC-PZ-6U	7.15	3.46	9.43	3.69	3.08	9.45	4.07	1.54	9.45	5.61
HC-PZ-7U	6.51	2.72	8.91	3.79	2.26	8.91	4.25	0.53	8.91	5.98
HC-PZ-8U	15.75	12.27	20.90	3.48	11.77	20.87	3.98	11.05	20.87	4.70
HC-PZ-9U	15.86	12.32	20.84	3.54	11.84	20.90	4.02	11.40	20.90	4.46
HC-PZ-10U	15.28	14.53	19.60	0.75	14.11	19.60	1.17	12.99	19.60	2.29
HC-PZ-11U	10.1	9.45	14.48	0.65	9.28	14.48	0.82	9.20	14.48	0.90
HC-PZ-12U	5.35	3.46	8.43	1.89	2.56	8.43	2.79	1.81	8.43	3.54
HC-PZ-13U	4.76	2.99	8.40	1.77	2.68	8.39	2.08	5.47	8.39	-0.71
HC-PZ-14U	6.03	2.95	10.05	3.08	2.31	10.04	3.72	2.03	10.04	4.00
HC-PZ-15U	8.28	5.75	11.72	2.53	5.45	11.75	2.83	4.76	11.75	3.52
HC-PZ-1L	11.48	8.37	25.11	3.11	8.06	25.05	3.42	7.30	25.05	4.18
HC-PZ-2L	12.15	9.25	23.56	2.90	9.19	23.54	2.96	9.09	23.54	3.06
HC-PZ-3L	9.97	6.96	23.50	3.01	6.58	23.50	3.39	5.61	23.50	4.36
HC-PZ-4L	9.17	7.13	20.53	2.04	6.98	20.55	2.19	6.63	20.55	2.54
HC-PZ-6L	6.06	3.62	16.86	2.44	3.47	16.80	2.59	3.39	16.80	2.67
HC-PZ-7L	5.5	1.58	16.99	3.92	1.44	16.99	4.06	1.00	16.99	4.50
HC-PZ-8L	14.89	11.75	29.05	3.14	11.35	29.07	3.54	10.82	29.07	4.07
HC-PZ-9L	15.3	12.64	28.72	2.66	12.42	28.70	2.88	12.02	28.70	3.28
HC-PZ-10L	15.98	14.34	29.89	1.64	13.96	29.85	2.02	13.28	29.85	2.70
HC-PZ-11L	8.96	8.18	22.02	0.78	8.06	22.05	0.90	7.88	22.05	1.08
HC-PZ-12L	5.07	2.23	15.75	2.84	1.77	15.75	3.30	1.28	15.75	3.79
HC-PZ-13L	4.77	3.22	16.22	1.55	3.07	16.18	1.70	2.65	16.18	2.12
HZ-PZ-14L	6.43	3.42	18.85	3.01	2.95	18.85	3.48	2.70	18.85	3.73
SC-MW-16L	8.02	5.11	19.80	2.91	4.97	19.82	3.05	5.21	19.81	2.81
MW-D-28	8.88	8.51	23.77	0.37	8.36	25.91	0.52	8.12	25.91	0.76
MW-D-35	7.11	6.37	24.42	0.74	6.19	24.42	0.92	5.97	24.42	1.14
MW-D-37	15.13	NM	NM	NM	14.18	31.70	0.95	14.05	31.70	1.08
MW-D-38	6.57	NM	NM	NM	5.52	22.76	1.05	5.40	22.76	1.17
MW-D-39	4.77	NM	NM	NM	3.72	20.69	1.05	3.48	20.69	1.29

Table 1

**Standard Chlorine Chemical Co., Inc.
4th Quarter 2015 Progress Report**

HCTS Gauging Data Summary

Well ID	Top of Casing Elevation MSL (NAD 83)	Oct-15			Nov-15			Dec-15		
		Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
HCWU-1	10.30	10.28	13.59	0.02	10.72	13.59	-0.42	10.22	13.59	0.08
HCWU-2	10.91	11.08	10.30	-0.17	10.34	10.30	0.57	-1.28	10.30	12.19
HCWU-3	9.85	10.71	10.24	-0.86	10.29	10.24	-0.44	10.62	10.24	-0.77
HCWU-4	8.54	8.87	12.94	-0.33	9.47	12.94	-0.93	10.27	12.94	-1.73
HCWU-5	8.16	9.09	12.30	-0.93	9.02	12.30	-0.86	9.47	12.30	-1.31
HCWU-6	5.84	7.37	10.35	-1.53	6.28	10.35	-0.44	1.21	10.35	4.63
HCWU-7	5.52	4.75	8.75	0.77	4.76	8.75	0.76	5.21	8.75	0.31
HCWU-8	5.65	6.08	7.25	-0.43	6.31	7.25	-0.66	7.33	7.25	-1.68
HCWU-9	5.66	3.14	6.85	2.52	3.94	6.85	1.72	3.23	6.85	2.43
HCWU-10	4.28	5.18	7.60	-0.90	3.63	7.60	0.65	3.15	7.60	1.13
HCWU-11	5.96	4.16	8.35	1.80	3.41	8.35	2.55	2.19	8.35	3.77
HCWU-12	5.26	6.50	8.27	-1.24	4.89	8.27	0.37	5.54	8.27	-0.28
HCWU-13	4.14	5.05	7.85	-0.91	5.97	7.85	-1.83	5.65	7.85	-1.51
HCWU-14	2.95	1.17	5.40	1.78	-0.31	5.40	3.26	-0.81	5.40	3.76
HCWU-15	4.44	3.91	8.77	0.53	5.11	8.77	-0.67	0.48	8.77	3.96
HCWU-16	3.98	0.89	8.50	3.09	0.12	8.50	3.86	-0.02	8.50	4.00
HCWU-17	3.31	0.06	7.50	3.25	-0.05	7.50	3.36	-0.55	7.50	3.86
HCWU-18	3.16	3.72	6.49	-0.56	2.82	6.49	0.34	3.41	6.49	-0.25
HCWU-19	2.97	0.18	8.39	2.79	-0.80	8.39	3.77	-1.11	8.39	4.08
HCWU-20	3.32	3.59	7.28	-0.27	5.62	7.28	-2.30	3.47	7.28	-0.15
HCWU-21	13.41	14.92	17.05	-1.51	12.61	17.05	0.80	12.40	17.05	1.01
HCWU-22	4.99	4.87	9.71	0.12	2.73	9.71	2.26	3.35	9.71	1.64
HCWU-23	11.53	9.32	12.00	2.21	9.04	12.00	2.49	2.34	12.00	9.19
HCWU-24	10.87	8.47	16.22	2.40	8.07	16.22	2.80	7.21	16.22	3.66
HCWU-25	16.60	15.76	21.38	0.84	15.17	21.38	1.43	19.69	21.38	-3.09
HCWU-26	11.71	9.23	17.50	2.48	8.93	17.50	2.78	8.62	17.50	3.09

Table 1

**Standard Chlorine Chemical Co., Inc.
4th Quarter 2015 Progress Report**

HCTS Gauging Data Summary

Well ID	Top of Casing Elevation MSL (NAD 83)	Oct-15			Nov-15			Dec-15		
		Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
DRWU-1	5.17	1.72	10.65	3.45	1.20	10.65	3.97	0.91	10.65	4.26
DRWU-2	5.63	2.03	11.80	3.60	1.52	11.80	4.11	1.23	11.80	4.40
DRWU-3	16.13	12.02	22.35	4.11	12.11	22.35	4.02	12.00	22.35	4.13
DRWU-4	4.71	1.13	12.14	3.58	0.67	12.14	4.04	0.28	12.14	4.43
DRWU-5	2.80	-0.32	8.81	3.12	-0.85	8.81	3.65	-1.16	8.81	3.96
DRWL-1	7.35	3.49	31.90	3.86	2.56	31.90	4.79	3.01	31.90	4.34
DRWL-2	3.09	0.02	26.87	3.07	-0.27	26.87	3.36	-0.72	26.87	3.81
DRWL-3	3.87	0.64	28.85	3.23	0.03	28.85	3.84	-0.11	28.85	3.98
DRWL-4	5.65	2.31	30.45	3.34	2.02	30.45	3.63	1.71	30.45	3.94
DRWL-5	5.74	1.83	29.65	3.91	0.59	29.65	5.15	-0.18	29.65	5.92
DRWL-6	17.36	13.78	40.80	3.58	13.61	40.80	3.75	13.31	40.80	4.05
DRWL-7	2.76	0.28	27.15	2.48	-0.81	27.15	3.57	-1.21	27.15	3.97
DRWL-8	3.17	0.01	28.65	3.16	-0.47	28.65	3.64	-0.75	28.65	3.92
DRWL-9	4.69	1.20	28.30	3.49	0.83	28.30	3.86	0.36	28.30	4.33
DRWL-10 ⁽¹⁾	12.52	9.76	36.61	2.76	9.37	36.61	3.15	8.85	36.61	3.67
DRWL-11	11.13	9.11	36.20	2.02	8.87	36.20	2.26	8.40	36.20	2.73

(1) Top of casing elevation at DRWL-10 is estimated based on field measurements pending final casing extension efforts.

Table 2

**Standard Chlorine Chemical Co., Inc.
4th Quarter 2015 Progress Report
DNAPL Summary**

Well ID	Oct-15				Nov-15				Dec-15			
	Depth to Water (ft-TOC)	Depth to DNAPL (ft-TOC)	Total Depth (ft- TOC)	DNAPL Thickness (ft)	Depth to Water (ft-TOC)	Depth to DNAPL (ft-TOC)	Total Depth (ft- TOC)	DNAPL Thickness (ft)	Depth to Water (ft-TOC)	Depth to DNAPL (ft-TOC)	Total Depth (ft- TOC)	DNAPL Thickness (ft)
DRWU-1	1.72	10.65	10.65	Trace	1.20	10.65	10.65	Trace	0.91	10.65	10.65	Trace
DRWU-2	2.03	NP	11.80	NP	1.52	NP	11.80	NP	1.23	NP	11.80	NP
DRWU-3	12.02	22.35	22.35	Trace	12.11	22.35	22.35	Trace	12.00	22.35	22.35	Trace
DRWU-4	1.13	NP	12.14	NP	0.67	NP	12.14	NP	0.28	NP	12.14	NP
DRWU-5	-0.32	NP	8.81	NP	-0.85	NP	8.81	NP	-1.16	NP	8.81	NP
DRWL-1	3.49	29.00	31.90	2.90	2.56	30.75	31.90	1.15	3.01	30.75	31.90	1.15
DRWL-2	0.02	NP	26.87	NP	-0.27	NP	26.87	NP	-0.72	NP	26.87	NP
DRWL-3	0.64	NP	28.85	NP	0.03	NP	28.85	NP	-0.11	NP	28.85	NP
DRWL-4	2.31	30.45	30.45	Trace	2.02	30.45	30.45	Trace	1.71	30.45	30.45	Trace
DRWL-5	1.83	28.25	29.65	1.40	0.59	26.15	29.65	3.50	-0.18	29.15	29.65	0.50
DRWL-6	13.78	NP	40.80	NP	13.61	NP	40.80	NP	13.31	NP	40.80	NP
DRWL-7	0.28	26.65	27.15	0.50	-0.81	26.65	27.15	0.50	-1.21	26.65	27.15	0.50
DRWL-8	0.01	NP	28.65	NP	-0.47	NP	28.65	NP	-0.75	NP	28.65	NP
DRWL-9	1.20	26.70	28.30	1.60	0.83	26.65	28.30	1.65	0.36	26.55	28.30	1.75
DRWL-10	9.76	33.61	36.61	3.00	9.37	36.21	36.61	0.40	8.85	35.71	36.61	0.90
DRWL-11	9.11	33.40	36.20	2.80	8.87	33.45	36.20	2.75	8.40	33.20	36.20	3.00
MW-D-28	8.51	19.17	23.77	4.60	8.36	21.01	25.91	4.90	8.12	21.91	25.91	4.00
MW-D-35	6.37	NP	24.42	NP	6.19	NP	24.42	NP	5.97	NP	24.42	NP
MW-D-37	NM	NM	NM	NM	14.18	31.30	31.70	0.40	14.05	31.30	31.70	0.40
MW-D-38	NM	NM	NM	NM	5.52	NP	22.76	NP	5.40	NP	22.76	NP
MW-D-39	NM	NM	NM	NM	3.72	NP	20.69	NP	3.48	NP	20.69	NP

ft-TOC: feet below top of casing.

NP: no product detected

NM: not measured

MW-D-28 and MW-D-35 were added to the routine monthly O&M efforts in September 2015

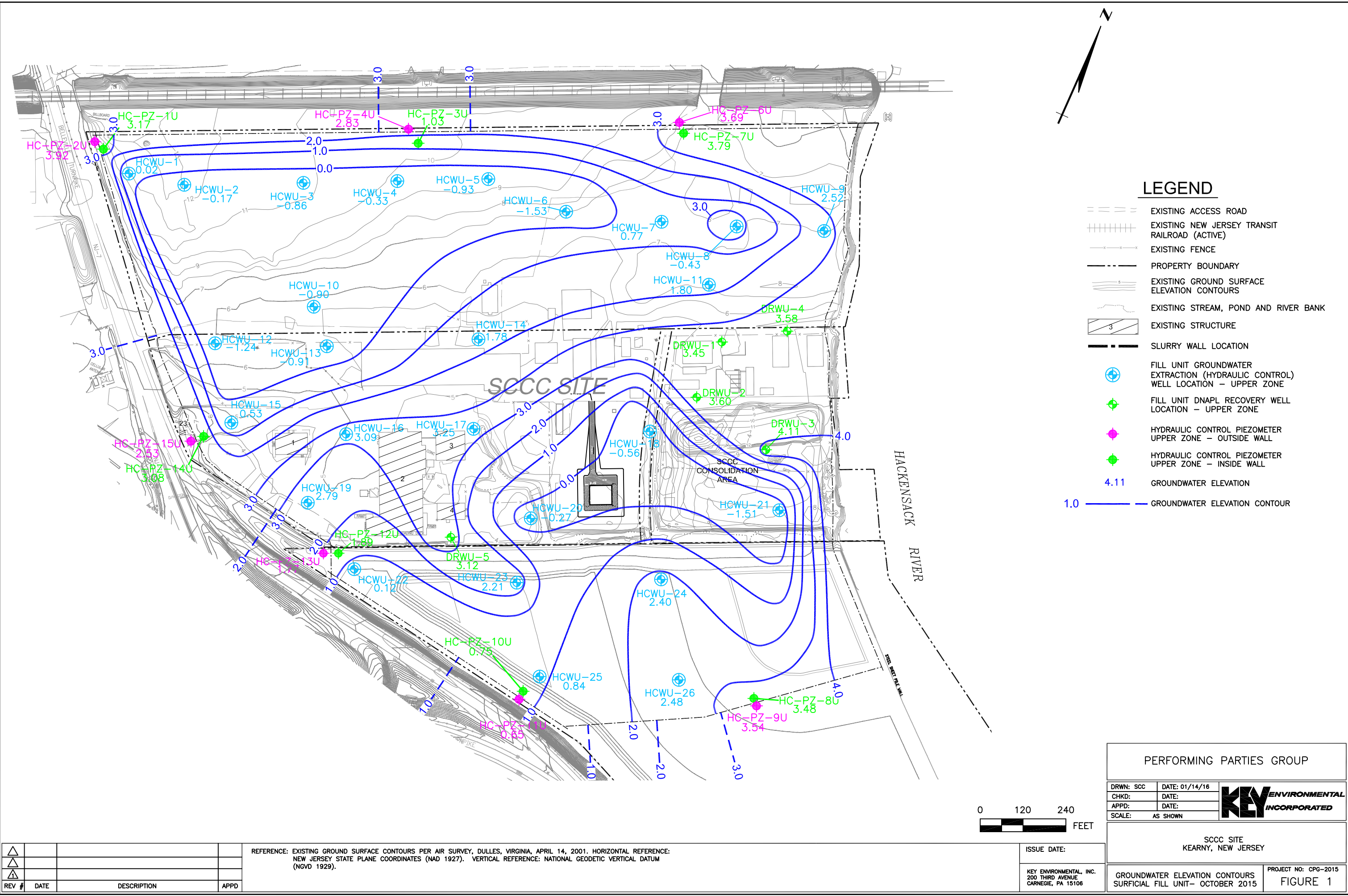
MW-D-37, MW-D-38 and MW-D-39 were added to the routine monthly O&M efforts in November 2015

DNAPL observed at MW-D-37 is not related to the SCCC Site

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FIGURES

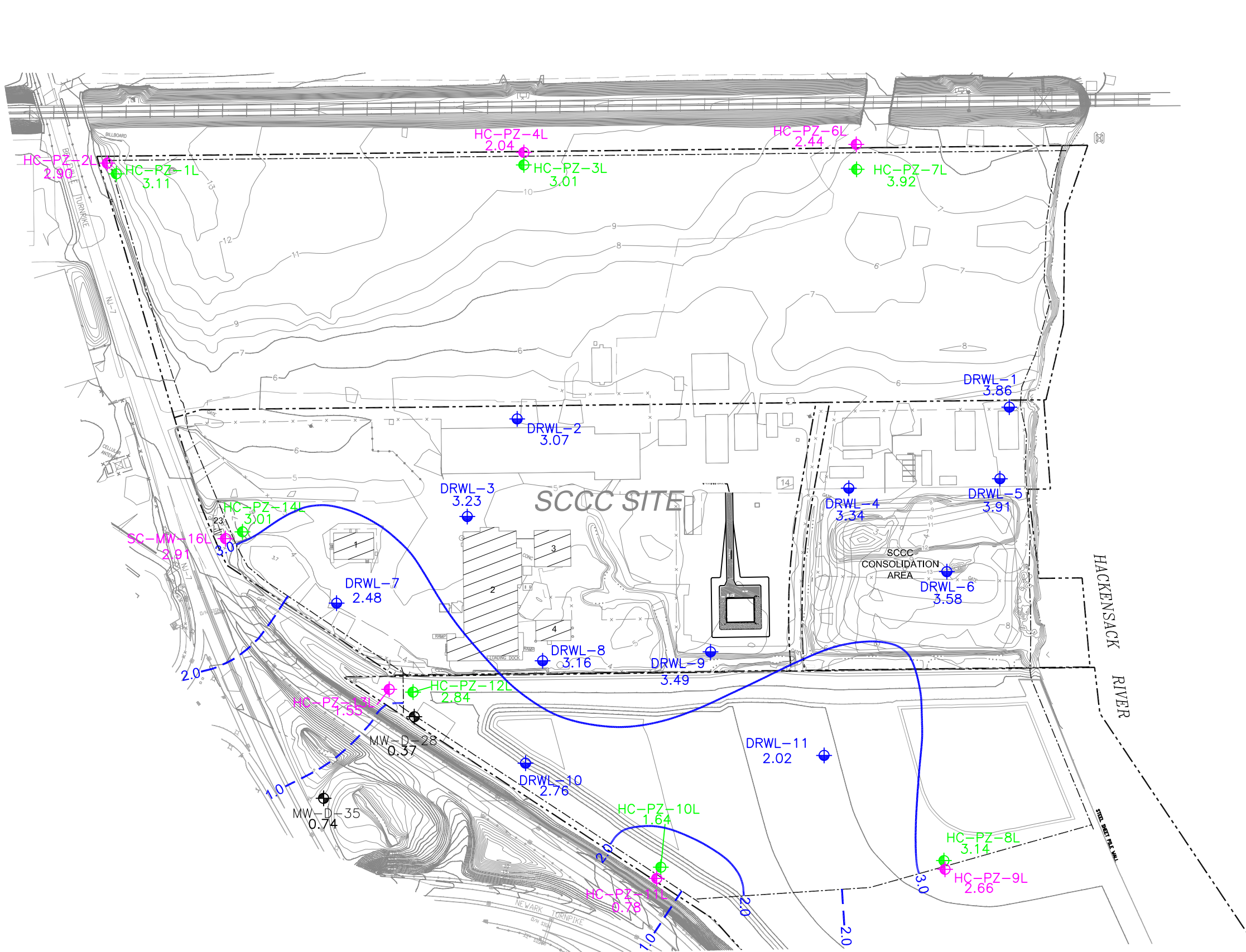
y:\00civil\keenvy\2015 groundwater monitoring\4th quarter\figure 1-october.dwg Last Saved By: Scomer 1/19/2016 10:24 AM Plotted By: Shelly Comer 1/19/2016 10:27 AM Scale: 1:2



REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

REV #	DATE	DESCRIPTION	APPD

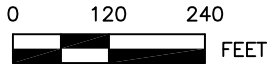
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LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- PROPERTY BOUNDARY
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING STREAM, POND AND RIVER BANK
- SLURRY WALL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION - LOWER ZONE
- HYDRAULIC CONTROL PIEZOMETER LOWER ZONE - OUTSIDE WALL
- HYDRAULIC CONTROL PIEZOMETER LOWER ZONE - INSIDE WALL
- GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR

NOTE:
TOP OF CASING ELEVATION AT DRWL-10 IS ESTIMATED
PENDING FINAL CASING EXTENSION EFFORTS.



REV #	DATE	DESCRIPTION	APPD

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

PERFORMING PARTIES GROUP

DRWN: SOC	DATE: 01/14/16
CHKD:	DATE:
APPD:	DATE:
SCALE:	AS SHOWN

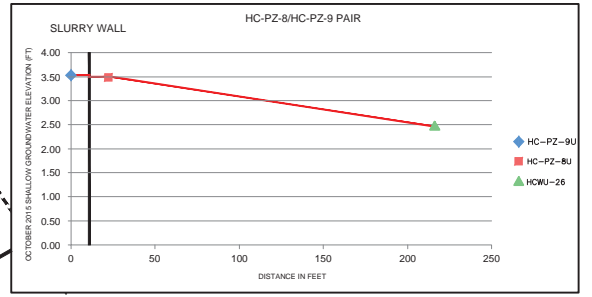
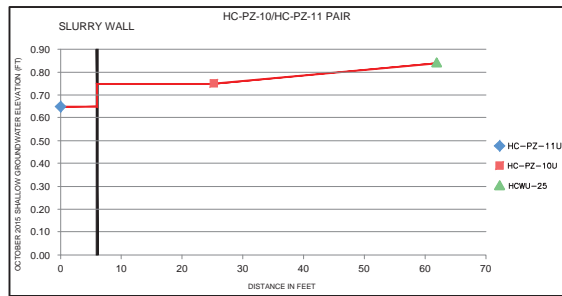
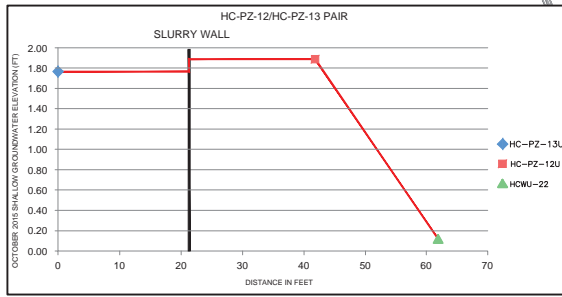
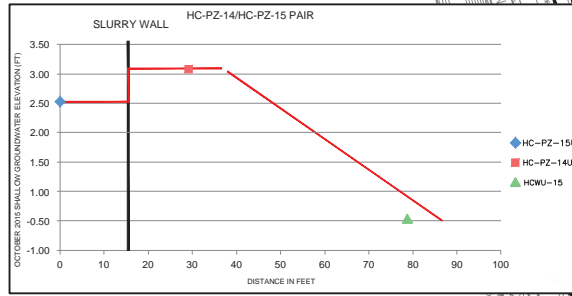
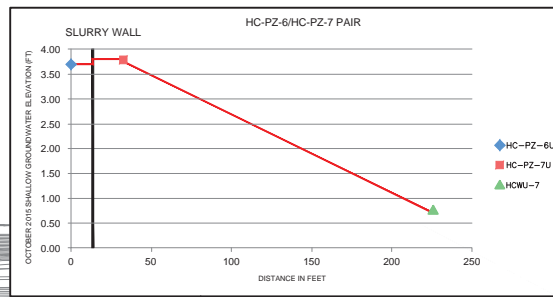
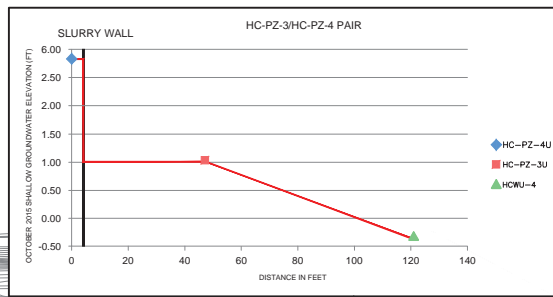
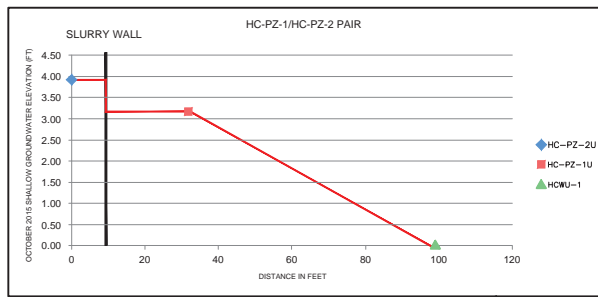


SCCC SITE
KEARNY, NEW JERSEY

GROUNDWATER ELEVATION CONTOURS
DEEP SAND UNIT - OCTOBER 2015

PROJECT NO: CPG-2015
FIGURE 2

y:\000\k\env\2015 groundwater monitoring\4th quarter\figure 3 site location with graphs.dwg Last Saved By: Somer 2/2/2016 6:29 AM Plotted By: Shelly Corner 2/2/2016 6:29 AM Scale: 1:2



LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING STORM SEWER
- EXISTING GAS LINE
- EXISTING OVERHEAD POWER LINE
- PROPERTY BOUNDARY
- EXISTING CONCRETE PAD
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING VEGETATION
- EXISTING STREAM, POND AND RIVER BANK
- EXISTING ELEVATION (FEET-MSL)
- EXISTING STRUCTURE
- SLURRY WALL LOCATION
- STEEL SHEET PILE WALL LOCATION
- FILL UNIT GROUNDWATER EXTRACTION (HYDRAULIC CONTROL) WELL LOCATION
- FILL UNIT DNAPL RECOVERY WELL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION
- HYDRAULIC CONTROL PIEZOMETER UPPER ZONE (APPROX.)
- HYDRAULIC CONTROL PIEZOMETER LOWER ZONE (APPROX.)

NOTE:
WELLS HCWU-16, HCWU-17, HCWU-23, HCWU-24, HCWU-26 WERE OFF DURING OCTOBER GAUGING EFFORTS.

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, OCTOBER 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

0 120 240
FEET

ISSUE DATE:
KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

PERFORMING PARTIES GROUP

DRWN: SCC DATE: 11/09/15
CHKD: DATE:
APPD: DATE:
SCALE: AS SHOWN

KEY ENVIRONMENTAL
INCORPORATED

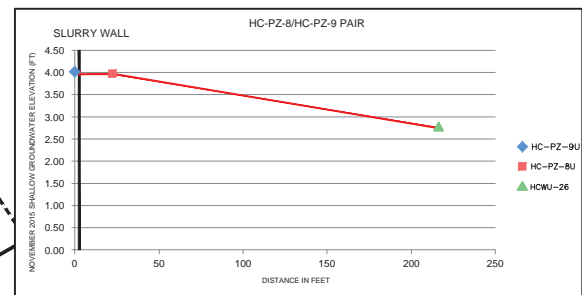
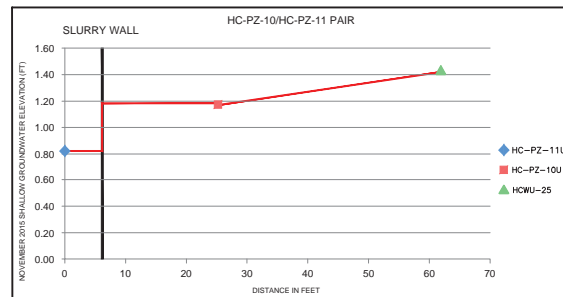
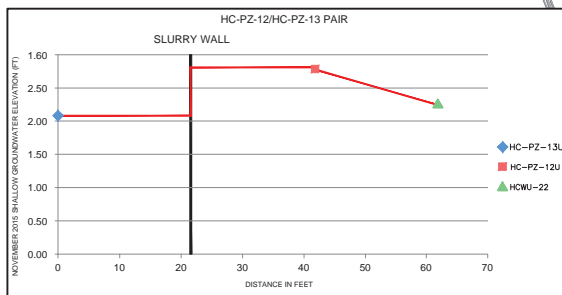
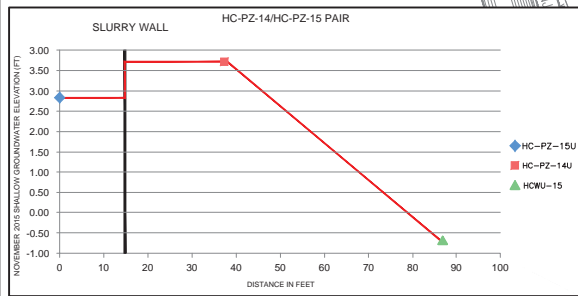
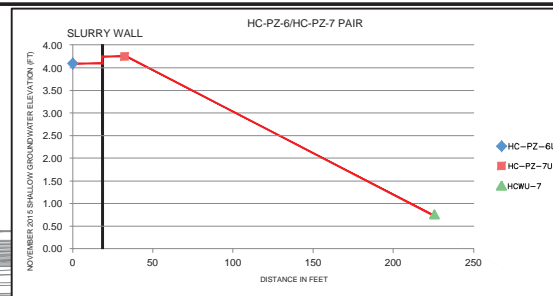
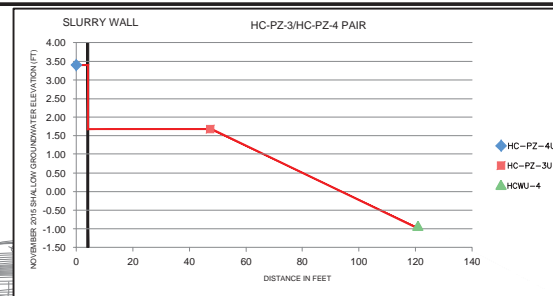
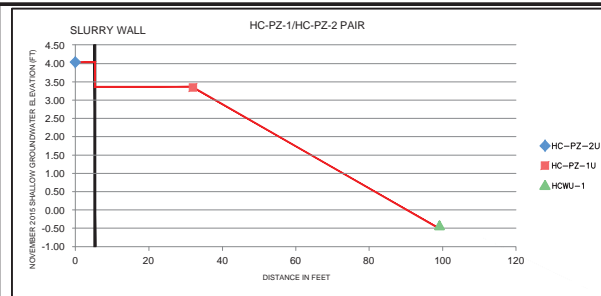
SCCC SITE
KEARNY, NEW JERSEY

GROUNDWATER GRAPHS
OCTOBER 2015

PROJECT NO: 2013-02
FIGURE 3

REV #	DATE	DESCRIPTION	APPD

y:\000\1\2015 groundwater monitoring\4th quarter\figure 4 site location with graphs.dwg Last Saved By: Sonner 1/19/2016 10:22 AM Plotted By: Shelly Comer 2/2/2016 6:29 AM Scale: 1:2



NOTE:
WELLS HCWU-12, HCWU-16, HCWU-22, HCWU-23, HCWU-24, HCWU-25 AND HCWU-26 WERE OFF DURING THE NOVEMBER GAUGING EFFORTS. SUB-GRADE ELECTRICAL SUPPLY WIRE POWERING HCWU-22, 23, 24, 25 AND 26 WAS FOUND TO BE SHORTED. WIRING WAS REPLACED IN EARLY DECEMBER 2015 AND THE WELLS BROUGHT BACK ONLINE.

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING STORM SEWER
- EXISTING GAS LINE
- EXISTING OVERHEAD POWER LINE
- PROPERTY BOUNDARY
- EXISTING CONCRETE PAD
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING VEGETATION
- EXISTING STREAM, POND AND RIVER BANK
- EXISTING ELEVATION (FEET-MSL)
- EXISTING STRUCTURE
- SLURRY WALL LOCATION
- STEEL SHEET PILE WALL LOCATION
- FILL UNIT GROUNDWATER EXTRACTION (HYDRAULIC CONTROL) WELL LOCATION
- FILL UNIT DNAPL RECOVERY WELL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION
- HC-PZ-9U HYDRAULIC CONTROL PIEZOMETER UPPER ZONE (APPROX.)
- HC-PZ-9L HYDRAULIC CONTROL PIEZOMETER LOWER ZONE (APPROX.)

0 120 240
FEET

ISSUE DATE:

KEY ENVIRONMENTAL, INC.
200 THIRD AVENUE
CARNEGIE, PA 15106

PERFORMING PARTIES GROUP

DRWN: SCC DATE: 11/09/15
CHKD: DATE:
APPD: DATE:
SCALE: AS SHOWN

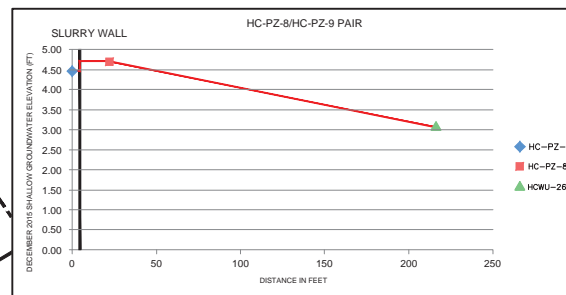
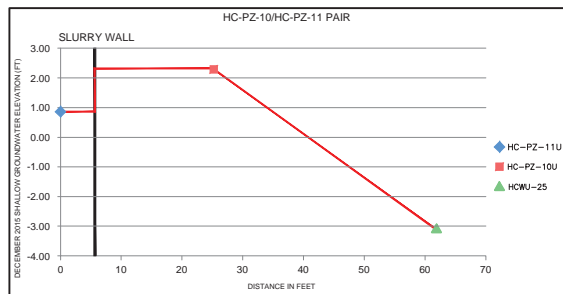
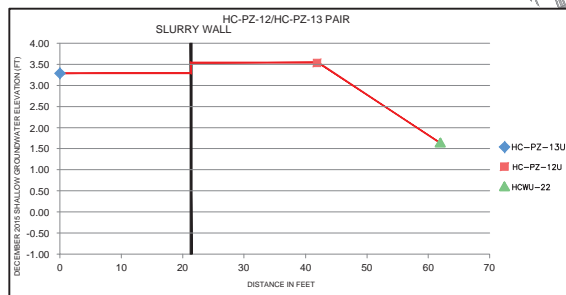
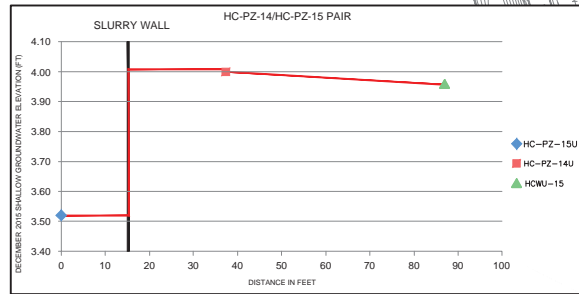
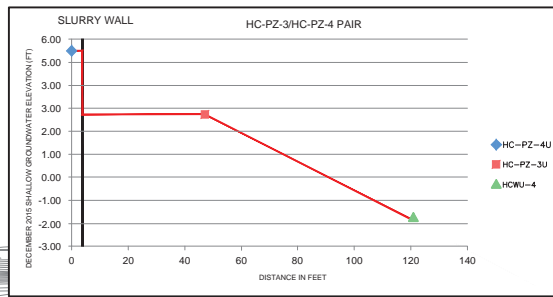
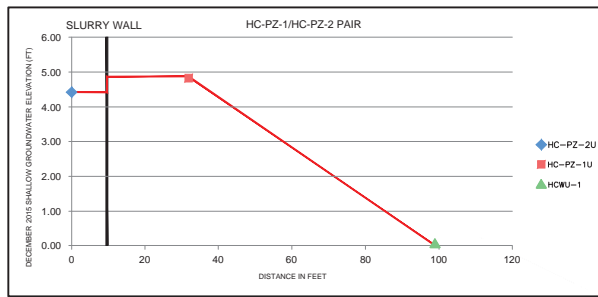


SCCC SITE
KEARNY, NEW JERSEY

GROUNDWATER GRAPHS
NOVEMBER 2015

PROJECT NO: 2013-02
FIGURE 4

y:\000\k\env\2015 groundwater monitoring\4th quarter\figure 5 site location with graphs.dwg Last Saved By: Somner 2/2/2016 6:24 AM Plotted By: Shelly Corner 2/2/2016 6:28 AM Scale: 1:2



LEGEND

- EXISTING ACCESS ROAD
- EXISTING NEW JERSEY TRANSIT RAILROAD (ACTIVE)
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING STORM SEWER
- EXISTING GAS LINE
- EXISTING OVERHEAD POWER LINE
- PROPERTY BOUNDARY
- EXISTING CONCRETE PAD
- EXISTING GROUND SURFACE ELEVATION CONTOURS
- EXISTING VEGETATION
- EXISTING STREAM, POND AND RIVER BANK
- EXISTING ELEVATION (FEET-MSL)
- EXISTING STRUCTURE
- SLURRY WALL LOCATION
- STEEL SHEET PILE WALL LOCATION
- FILL UNIT GROUNDWATER EXTRACTION (HYDRAULIC CONTROL) WELL LOCATION
- FILL UNIT DNAPL RECOVERY WELL LOCATION
- SAND UNIT DNAPL RECOVERY WELL LOCATION
- HC-PZ-9U HYDRAULIC CONTROL PIEZOMETER UPPER ZONE (APPROX.)
- HC-PZ-9L HYDRAULIC CONTROL PIEZOMETER LOWER ZONE (APPROX.)

NOTE:
WELLS HCWU-19 AND HCWU-23 WERE OFFLINE AT THE TIME OF GAUGING. WELL HCWU-2 WAS OPERATIONAL BUT CONVEYANCE LINE WAS PLUGGED AND REQUIRED JETTING TO ACHIEVE NORMAL RECOVERY FLOW RATE.

REFERENCE: EXISTING GROUND SURFACE CONTOURS PER AIR SURVEY, DULLES, VIRGINIA, APRIL 14, 2001. HORIZONTAL REFERENCE: NEW JERSEY STATE PLANE COORDINATES (NAD 1927). VERTICAL REFERENCE: NATIONAL GEODETIC VERTICAL DATUM (NGVD 1929).

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ISSUE DATE:
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CHKD: DATE:
APPD: DATE:
SCALE: AS SHOWN



SCCC SITE
KEARNY, NEW JERSEY

GROUNDWATER GRAPHS
DECEMBER 2015

PROJECT NO: 2013-02
FIGURE 5

REV #	DATE	DESCRIPTION	APPD